

Abstract of Disclose

A power-up circuit includes a power supply voltage level follower unit for outputting a first bias voltage and a second
5 bias voltage which increase or decrease in proportion to a power supply voltage; a first power supply voltage detecting unit for detecting a first critical voltage level where a logic level of a power-up signal is changed in response to the first bias voltage when the power supply voltage decreases; a
10 second power supply voltage detecting unit for detecting a second critical voltage level where a logic level of the power-up signal is changed in response to the second bias voltage when the power supply voltage increases; and a trigger unit for inverting an output signal of the trigger unit in
15 response to one of a first detect signal outputted from the first power supply voltage detecting unit when the power supply voltage decreases and a second detect signal outputted from the second power supply voltage detecting unit when the power supply voltage increases, wherein the second critical
20 voltage level is higher than the first critical voltage level.